Mathematische Annalen

Band 305 1996

Begründet 1868 durch *Alfred Clebsch* und *Carl Neumann*, früher herausgegeben von *Alfred Clebsch* (1869–1872), *Carl Neumann* (1869–1876), *Felix Klein* (1876–1924), *Adolph Mayer* (1876–1901), *Walter v. Dyck* (1888–1921), *David Hilbert* (1902–1939), *Otto Blumenthal* (1906–1938), *Albert Einstein* (1920–1928), *Constantin Carathéodory* (1925–1928), *Erich Hecke* (1929–1947), *Bartel, L. van der Waerden* (1934–1968), *Franz Rellich* (1947–1955), *Kurt Reidemeister* (1947–1963), *Richard Courant* (1947–1968), *Heinz Hopf* (1947–1968), *Gottfried Köthe* (1957–1971), *Heinrich Behnke* (1938–1972), *Max Koecher* (1968–1976), *Lars Garding* (1970–1978), *Konrad Jörgens* (1972–1974), *Fritz John* (1968–1979), *Peter Dombrowski* (1970–1983), *Louis Boutet de Monvel* (1979–1983), *Wulf-Dieter Geyer* (1979–1983), *Elmar Thoma* (1974–1990), *Winfried Scharlau* (1984–1990), *Hans Grauert* (1963–1991), *Heinz Bauer* (1971–1992), *Hans Föllmer* (1990–1993)
Band 1 – 80 Leipzig, B. G. Teubner, ab Band 81 (1920) Berlin, Springer

Herausgegeben von
Herbert Amann, Zürich · **Jean-Pierre Bourguignon,** Palaiseau
Yoshikazu Giga, Sapporo · **Friedrich Hirzebruch,** Bonn
Nigel Hitchin, Cambridge · **Matthias Kreck,** Mainz
Ngaiming Mok, Hong Kong · **Stefan Müller,** Zürich
Gilles Pisier, Paris · **Reinhold Remmert,** Münster
Ken A. Ribet, Berkeley, CA · **Alain-Sol Sznitman,** Zürich

Springer

Copyright

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication,the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any error or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA: Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0025-5831, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

The Canada Institute for Scientific and Technical Information (CISTI) provides a comprehensive, world-wide document delivery service for all Springer-Verlag journals. For more information, or to place an order for a copyright-cleared Springer-Verlag document, please contact Client Assistant, Document Delivery, Canada Institute for Scientific and Technical Information, Ottawa, Canada K1A 0S2 (Tel.: 613-993-9251; Fax: 613-952-8243; e-mail: cisti.docdel@nrc.ca).

Printers: Graphischer Betrieb Konrad Triltsch, Würzburg
© Springer-Verlag Berlin Heidelberg 1996
Springer-Verlag GmbH & Co. KG, Berlin, Germany
Printed in Germany

Inhalt/Contents

André, Y.: On the Shafarevich and Tate conjectures for hyperkähler varieties 205

Baragar, A.: Rational points on K3 surfaces in $\mathbb{P}^1 \times \mathbb{P}^1 \times \mathbb{P}^1$ 541
Burke, M. R., Todorcevic, S.: Bounded sets in topological vector spaces 103
Burns, D., Flach, M.: Motivic L-functions and Galois module structures 65
Bădescu, L., Schneider, M.: A criterion for extending meromorphic functions 393

Coulhon, Th., Müller, D., Zienkiewicz, J.: About Riesz transforms on the Heisenberg groups 369
Crew, R.: The differential Galois theory of regular singular p-adic differential equations 45

Dadarlat, M., Loring, T. A.: Classifying C^*-algebras via ordered, mod-p K-theory 601

Escher, J., Simonett, G.: Analyticity of the interface in a free boundary problem 439
Eswara Rao, S.: Classification of Loop Modules with finite dimensional weight spaces 651

Ferrer, L., Martínez, A., Milán, F.: Symmetry and uniqueness of parabolic affine spheres 311
Ferus, D., Pedit, F.: Isometric immersions of space forms and soliton theory 329
Flach, M. → Burns, D.
Forstneric, F., Globevnik, J., Stensønes, B.: Embedding holomorphic discs through discrete sets 559
Fouvry, E., Mauduit, C.: Sommes des chiffres et nombres presque premiers 571

Globevnik, J. → Forstneric, F.
Gómez González, E.: The trisecant conjecture 153

Howe, E. W.: The Weil pairing and the Hilbert symbol 387

Jaworski, W., Rosenblatt, J., Willis, G.: Concentration functions in locally compact groups 673

Jelonek, W.: Some simple examples of almost Kähler non-Kähler structures 639

Kawai, S.: The symplectic nature of the space of projective connections on Riemann surfaces 161

Li, H.: Hypersurfaces with constant scalar curvature in space forms 665
Li, J.-S., Zhu, C.-B.: On the decay of matrix coefficients for exceptional groups 249
Loring, T. A. → Dadarlat, M.

Martínez, A. → Ferrer, L.
Mauduit, C. → Fouvry, E.
Megyesi, G., Szabó, E.: On the tacnodes of configurations of conics in the projective plane 693
Milán, F. → Ferrer, L.
Mittenhuber, D.: On the causal structure of Lorentzian Lie groups. A globality theorem for Lorentzian cones in certain solvable Lie algebras 343
Moishezon, B., Robb, A., Teicher, M.: On Galois covers of Hirzebruch surfaces 493
Moriwaki, A.: Lower bound of self-intersection of dualizing sheaves on arithmetic surfaces with reducible fibres 183
Müller, D. → Coulhon, Th.

Nakao, M.: Decay of solutions of the wave equation with a local nonlinear dissipation 403

Pedit, F. → Ferus, D.

Reed, D.: The topology of conjugate varieties 287
Robb, A. → Moishezon, B.
Roitberg, J.: Genus and symmetry in homotopy theory 381
Rosenblatt, J.→Jaworski, W.

Schmutz, P.: Systoles of arithmetic surfaces and the Markoff spectrum 191
Schneider, M. → Bădescu, L.
Shevchishin, V. V.: The Thullen type extension theorem for holomorphic vector bundles with L^2-bounds on curvature 461

Siebert, Th: Lie algebras of derivations and affine algebraic geometry over fields of characteristic 0 271
Simonett, G. → Escher, J.
Spieß, M.: Artin-Verdier duality for arithmetic surfaces 705
Stensønes, B. → Forstneric, F.
Szabó, E. → Megyesi, G.

Tadić, M.: Correspondence on characters of irreducible unitary representations of $GL(n, \mathbb{C})$ 419
Tamanoi, H.: Higher Schwarzian operators and combinatorics of the Schwarzian derivative 127
Teicher, M. → Moishezon, B.
Todorcevic, S. → Burke, M. R.

Venturini, S.: The Kobayashi metric on complex spaces 25

Willis, G. → Jaworski, W.

Yamagami, S.: Crossed products in bimodules 1
Yu, J.: Combinatorial structure of Stokes regions of a simple singularity 355

Zhu, C.-B. → Li, J.-S.
Zhu, F.: On the inverse Abel transforms for certain Riemannian symmetric spaces of rank 2 617
Zienkiewicz, J. → Coulhon, Th.